Game Programming Starter Kit 5.0

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Congratulations on your purchase of the Game Programming Starter Kit 5.0.

This complete starter package includes the **Microsoft Visual C++ Introductory Edition 6**. This specially licensed version of Visual C++ lets you create an unlimited number of programs; however you cannot redistribute the executables. Plus you get expert Guidance on learning the C++ language, including example programs.

This Kit also includes **Microsoft DirectX 8 SDK** that you can use to help make your applications DirectX compatible.

This Kit also contains the **3D GameStudio** allowing you to create interactive realtime applications - especially 2D and 3D computer games – quick, easy and without previous programming knowledge.

This kit also contains the entire eBook, **Tricks of Windows Game Programming Gurus** and supporting files from the book's CD-ROM.

This kit also contains the printed book, **Game Design Secrets of the Sages** and supporting files from the book.

Microsoft Visual C++ Introductory Edition

Disk One

INSTALLATION INSTRUCTIONS

Please read the **Readme** file before installing this product. It contains important information regarding the installation of the compiler.

To begin the installation, use windows Explorer and double-click on the **SETUP.EXE** file on the CD-ROM.

NOTE: If your CD-ROM drive is set up for AUTOPLAY the installation routine will automatically start when you insert the CD-ROM.

Next, click the Next button to proceed with the installation. Then read the EULA and click on the "Accept" choice and click on the Next button. Then enter your name and your company's name and click on the Next button.

The installer will make some checks of your operating system and version of your internet browser. It may ask you to upgrade your browser or install a service pack if it is critical for the operation of the program.

After this point the actual installation of Visual C++ begins. There are two choices, Typical or Custom. After this choice is made the files for the program are copied to your computer's hard drive. Once Visual C++ is installed the installation program will ask you if you want to install the documentation from the CD-ROM. The documentation will take an additional 140 MBs of hard disk space. After this point the installation is complete.

Microsoft® DirectX® 8.0 SDK

Disk Two

This Section Includes:

- General Description
- Installation
- CD-ROM Layout

GENERAL DESCRIPTION

CD-ROM Two contains the Microsoft DirectX 8.0 Software Development Kit (SDK). It contains all DirectX software required to create DirectX 8.0 compliant applications. Parts of this SDK will also be made available for download at the Microsoft DirectX developer web page

(http://msdn.microsoft.com/directx).

Major components include: DirectX 8.0 system components (runtimes); DirectX 8.0 Application Programming Interface (API) Documentation for each of the DirectX core areas (written for C++ or Visual Basic developers); DirectX 8.0 headers & libraries; Sample applications and source code; miscellaneous tools and utilities.

After installing, those new to DirectX should start with the DirectX 8.0 documentation. More seasoned developers may also want to view the "WHAT'S NEW" section. Professional DirectX developers should refer to the "KNOWN ISSUES" section prior to raising concerns.

INSTALLATION

ALWAYS UNINSTALL PREVIOUS RELEASES of the DirectX SDK prior to installing DirectX 8.0 SDK Release (see UnInstall). The directory structure and file names have changed significantly. Installing on top of a previous installation will cause you problems.

On Windows 2000 systems, you must be logged in as administrator to install the DirectX 8.0 runtimes. If you install the BDA cab, the DirectX 8.0 setup program requires that you restart your system.

UnInstall:

To uninstall, use "Add/Remove Programs" from the Control Panel to uninstall the InstallShield installations.

CD LAYOUT

The following is a brief description of the directories found with a complete DirectX 8.0 SDK download. Depending on options specified during installation, some of these directories can be installed on your hard drive.

\Bin

High level DirectX applications & tools.

All can be accessed from the Start menu if "Utilities" are installed.

\Doc

Contains reference documentation for the DirectX 8.0 APIs.

This Documentation must be viewed with Windows HTMLHelp.

\Essentls

\DMusProd (Direct Music Producer)

- DirectMusic Producer is the authoring tool for Direct Music. It allows composers and sound designers to use the interactive and variable resources of DirectMusic along with the consistent sound performance of DLS. DirectX Audio Scripting can also be authored and tested within Producer. The DirectMusic Producer setup program and all files are located here.

\Extras

\Direct3D

- Skinning exporter tools

\DirectShow

- Contains the DVDBoilerplate. See readme.txt within the directory

  for more information.

- Contains additional media that can be used with DirectShow and the

  DirectShow Editing Services (DES) interfaces.

\Documentation

- Contains DirectX 7 HTMLHelp Documentation for English and Japanese.
- Also contains DirectX 7 Documentation in Microsoft Word format

  (English only).

\GameVoice

- Contains the installer for the English Version of Game Voice Share, which includes voice communication and game launching functionality. For more information on Game Voice, visit http://www.gamevoice.com.

\Symbols

- Contains directories of DirectX 8.0 symbol files for Win2000 and Win9x (retail and debug for each).

\Include

contains DirectX 8.0 include files for DirectX core components.

\Lib

contains DirectX 8.0 library files for DirectX core components.

\License

Text versions of the DirectX SDK and End User License Agreements and the Redistributable License Agreement.

GPSK5 Upgrade Voucher

Use this voucher for ordering an upgrade to the GameStudio Extra, Commercial, or Professional Edition that offer more features for high-end game development. Please send the voucher to:

Conitec, Inc.
1951 4th Ave, #301
San Diego, CA 92101
Tel (619) 702-4420

You can alternatively order online at http://www.3dgamestudio.com.
Please send me:

❑ **GameStudio Extra Edition ($69 instead of $99)**
- **Terrain for outdoor levels, geometric LOD**
- **Flare sprites, alpha channel transparency**
- **Screen resolution 1024x768x16**

❑ **GameStudio Commercial Edition ($169 instead of $199)**
- **Colored light sources, dynamic shadows**
- **Multiplayer games for 4 players**
- **AVI movie and CD audio player**
- **No watermark on screen**

❑ **GameStudio Professional Edition ($1220 instead of $1250)**
- **Client/Server System for unlimited multiplayer games**
- **Mirrors and beam effects**
- **Resource file packer / starter window composer**
- **VC++/Delphi Source Developer Kit**
- **Distributable level editor for end users**
- **Screen resolution 1600x1200x32**
- **12 months email support**

Delivery cost ❑ $15 (USA) ❑ $35 (Canada)
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- Skinning exporter tools

\DirectShow

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contains DirectX 8.0 include files for DirectX core components.

\Lib

contains DirectX 8.0 library files for DirectX core components.

\License

Text versions of the DirectX SDK and End User License Agreements and the Redistributable License Agreement.

\Redist

Redistributable versions of the DirectX 8.0 Runtime.

\Samples

Contains all sample code and sample binaries. Most samples can be accessed from the Start menu when installed via the downloaded InstallShield setup.

\SDKDev

This directory contains the runtime installs that are installed with the SDK. They are English only and contain both debug and retail

DirectX 8.0 system components that can be "switched" between retail and debug without re-installing. For the DirectX 8.0 components, retail or debug can be switched via the DirectX Control Panel.

The \retail folder contains the setup that will install non-DirectX 8.0 retail components while the \debug folder will install all debug components. Both install DX8 retail and debug components. These are the only components that can be "switched".

Disk Three Contents

- 3D GameStudio
- Tricks of the Game Programming Gurus eBook, CD-ROM materials including Source Code and errata.
- Game Design Secrets of the Sages source code.

3D Game Studio

Disk Three

Welcome to the fascinating world of creating 3D games and applications with 3D GameStudio!

If you have never worked before with 3D GameStudio, open the level editor WED and work through the WED tutorial. You'll need around 100 MB free space on your hard disk. DirectX 7.0 or above must be installed on your PC.

Only two very small test levels, office and terrain, are included in the normal installation. The example games, as well as the workshops can be installed separately by just copying their folders from the CD-ROM games or workshops folder into the GameStudio folder. Their paths are set to expect the templates scripts in the ..\template folder, so they won't run in another location without modifying the path before. If you want to edit them, take care that the files are not set to read/only.

If you have internet access, please visit www.3dgamestudio.com periodically. You'll find many resources, free updates and other goodies there, as well as the user magazine and the forum.

To install you can run SETUP.EXE from the root of you CD-ROM Drive; or simply use the menu interface by running START.EXE from the root of the CD-ROM Drive. Be sure to view all of the documentation installed including the WDL eBook in pdf form.

(Adobe Acrobat is included on this CD-ROM and can be installed from the interface by clicking on the Adobe Acrobat button on the ebook page, or by running the ar500enu.exe file from the root.)

Tricks of Windows Game Programming Gurus eBook and CD-ROM

Disk Three

The location of the eBook and the supporting files is in the EBOOK directory on CD-ROM three.

- INTRODUCTION
- THE BONUS ARTICLES and BOOKS on General 3D and Direct3D (PLEASE READ !!!!!!!)
- INSTALLING DIRECTX
- INSTALLING THE SOURCE CODE FROM THE BOOK
- PLAYING THE GAMES :)
- PROBLEMS YOU MIGHT ENCOUNTER

INTRODUCTION

CD-ROM and software copyright (C) 1999 Macmillan Computer Publishing, Andre' LaMothe, Xtreme Games LLC. All rights reserved. Individual programs are copyrighted by their respective owners and may require separate licensing.

This CD-ROM may not be redistributed without prior written permission from the publisher. The right to redistribute the individual programs on the CD-ROM depends on each program's license. Consult each program for details.

Welcome to the wonderful world of Tricks Next Gen! On this CD is aplethora of digital treasures from source code, games, and DirectX, to applications, and electronic bonus books on 3D, Direct3D, and general topics.

The first thing you might notice is that isn't any kind of main installation program on the CD. I have found that 9 out of 10 times the best installer is the reader since only he/she knows what

and where to install things, so I'm going to leave the actual file copying and installation to you.

However, within each directory there is a README.TXT file that explains what the files are and what they are for. The CD is set up like this:

T3DGAME <DIR> - The main directory.

|

\DIRECTX <DIR> - Contains DirectX SDK.

\ONLINEBOOKS <DIR> - Contains the On-Line books on 3D.

\ARTICLES <DIR> - Contains the extra articles.

\ARTWORK <DIR> - Contains stock art media for your use.

\SOUND <DIR> - Contains stock sound and MIDI for your use.

\SOURCE <DIR> - Contains the entire source code for the book.

\GAMES <DIR> - A lot of cool games!

\GOODIES <DIR> - It's a surprise!

\ENGINES <DIR> - This directory contains numerous 2D/3D engines including the entire Genesis3D engine from Eclipse Software along with on-line API and usuage manuals written by David Dougher.

THE BONUS ARTICLES and BOOKS on General 3D and Direct3D

Volume II of Tricks will contain chapters on the mathematics and software algorithms on 3D graphics written by me (Andre' LaMothe). However, to get you started on 3D, so you don't have to wait for Volume II, two contributing authors have written complete on-line books on the subject of General 3D and Direct3D. These are really part of the physical book and you should of course read them when you are ready. They cyber-books can each be found in the following directories:

T3DGAME\ONLINEBOOKS\DIRECT3D_ONLINE\ - The chapters, source, etc. for the complete on-line D3D Retained\Immediate Mode book by the brilliant young programmer\author -- Matthew Ellis.

T3DGAME\ONLINEBOOKS\GENERAL3D_ONLINE\ - The chapters, and support files for the complete on-line general 3D book by Sergei Savchenko, one of the worlds leading 3D engine developers and the developer of the 3DGPL engine.

Both books consist of a number of chapters in either .HTML, or .DOC. We put the books on the CD for two reasons: to save you money in the printing of the book and keep the page count down, and since Direct3D is changing so quickly I didn't want to date the internal material inside the book.

In addition to the books there are numerous articles, white papers, and a bonus Chapter on game programming on the CD also. They can be found in:

INSTALLING DIRECTX

To run the DirectX programs from this book and to create your own, you must have the DirectX 7.0 (or better) Run-Time system and Software Development Kit (SDK) loaded. Both the Run-Time files and the SDK are contained on this CD within the DIRECTX\ directory. The README.TXT within the DIRECTX\ sub-directory will give you more details on the setup and installation of DirectX, but basically you must first install the run-time files and then the SDK. The SDK is needed by your compiler, so it can access the header, and library files needed to build DirectX applications.

INSTALLING THE SOURCE CODE FROM THE BOOK

The source code and data for each chapter of this book are contained within the SOURCE\ sub-directory. I suggest simply copying the entire SOURCE\ directory as-is onto your hard drive by "dragging" it from the this CD or by using XCOPY or other similar technique.

**** BONUS CHAPTER ****

Also, make sure to check out Bonus Chapter 15 which is only on the CD. The text of the chapter is in both MS Word and Acrobat format. The Chapter covers "Text Games".

Ebooksource.exe located on the root of CD-ROM Three can be used to copy all the provide code from the CD-ROM to your hard drive for better access. It can also be launched from the Menu interface.

PLAYING THE GAMES :)

Last, but definetely not least are the games!!! I have placed a number of games on the CD for your enjoyment. They are contained within the GAMES\ sub-directory. Take a look at each to see how to install them.

PROBLEMS YOU MIGHT ENCOUNTER

* Read Only Flag *

This is a very important detail, so read on. When creating a CD ROM disk all the files will be written with the READ-ONLY flag enabled. This is fine in most cases unless you copy the files to your hard drive (which you will) and then edit and try to write the files back to disk. You will get a READ-ONLY protection error. Fixing this is a snap. You simply need to clear the READ-ONLY flag on any files that you want to modify. There are 3 ways to do it. First, you can do it with Windows and simply navigate into the directory with the file you want to clear the READ-ONLY flag and then select the file, press the RIGHT mouse button to get the file properties and then clear the READ-ONLY flag and APPLY you change. You can do this will more than one file at once by selecting a group of files.

The second way is to use the File Manager and perform a similar set of operations as in the example above. The third and best way is to the DOS ATTRIB command with a DOS prompt. Here's how:

Assume you have copied the entire SOURCE directory on your hard drive to the location C:\SOURCE. To reset all the READ-ONLY attributes in one fell swoop you can use the ATTRIB command. Here is the syntax:

C:\SOURCE\ATTRIB -r *.* /s

This says to clear the READ-ONLY flag "r" from all files "*.*" and all lower

sub-directories "/s".

* DirectX Driver Problems *

DirectX may not have a driver for your video or sound card. If this is the case, you will be notified during installation. But don't worry if DirectX doesn't install a driver, it will still work, just not as good. If this happens you'll have to go to the manufacturer of your video or sound card and look for DirectX drivers, or else, keep an eye out at the Microsoft DirectX site for new updates.

* Compilation Problems *

99% of compiler problems are "pilot" errors. So before you think that something is wrong, make sure that you have all your DirectX library, and header paths set up in the compiler. Make sure that you are creating a standard Win32 .EXE (if you are making a DirectX app). Make sure you have manually included the DirectX .LIB files in your link list. And finally, make sure that you can compile a basic "hello world" program. Don't jump into DirectX Windows programming without getting your compiler and environment setup properly.

* Video Problems *

There are some video cards that even with a DirectX driver, still don't work correctly. This will appear as a sudden flash of black or white video when you try to run some of the demos. If this happens, try going into the display properties and resetting your machine's video to 640x480 in 256 colors.

This is the most common mode for the demos and code of the book and may solve your problems. To make the switching quick, there is a little utility called "Quickres" that is part of the "PowerTools" utility suite. Check out the Web for the program. It sits in your system tray and allows you to instantly change video modes without re-booting.

* Reading the Articles and On-Line Books

Everything on the CD is either in .DOC, .TXT, .PDF, or .HTML. Hence, you will need something that can read .HTML such as Internet Explorer, or Netscape Communicator, Adobe Acrobat Reader for .PDF, and MS WORD 7.0+, or the MS WORD Reader to read the .DOC files

Game Design Secrets of the Sages

Disk Three

The location of the supporting files is in the PRINTEDBOOK directory on CD-ROM three.

Ebooksource.exe located on the root of CD-ROM Three can be used to copy all of the provided code from the CD-ROM to your hard drive for better access. It can also be launched from the Menu interface.

Register Your Software

You can register at our Web site:

http://www.macmillansoftware.com/register/

Product Support

You are eligible for 30 days of "getting started" support. Microsoft Corporation does not offer support for this specially licensed version of Visual C++, Introductory Edition 6.0. Microsoft does offer a great deal of quality information concerning the installation and use of their software on their web site(s). Please visit **http://www.microsoft.com** for this type of information.

NOTE: "Getting Started" support covers successful installation of the software and use of the eBook and source code. It does not include help with using the features of the Microsoft programs and 3D GameStudio program you create, or with other programs/files/source code not included on these CD-ROMs.

If you contact us, please be prepared to give us the following information:

- Complete name of this product and ISBN (located on the bottom of the box).
- Version number on the CD-ROM.
- Specific details of the problem you are having.
- Complete information on your computer setup.

Please visit the following URL to receive support:

http://www.mcp.com/help.htm

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